

What is claimed is:

Claim 1. In an electronic still image camera comprising:

an optical lens,

5 a shutter mechanism operably associated with said lens,

10 an array of discrete light sensing pixel elements, each pixel element being responsive when said shutter mechanism is operated to incident illumination from a subject image radiating through said lens and shutter mechanism to generate an analog picture information signal corresponding to said subject image,

15 pixel multiplexing means responsive to each array of pixel elements for separating an output from each pixel element into its primary color components,

20 analog to digital converter means responsive to the outputs of said pixel multiplexing means for converting said analog signals into corresponding digital data information signals,

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25 digital data compression means for applying
a digital data compression algorithm to said
digital data information signals to generate
compressed digital data information signals, and
removably mounted memory means for storing
said compressed digital data information signals,
the improvement comprising operator
30 selectable control means for controlling digital
data format compatibility between said compressed
digital data information signals and one of a
plurality of operator selectable types of computer
apparatus.

35 Claim 2. The improved electronic still
image camera of Claim 1 further comprising switch
activated control means for improving the image
signal storage efficiency by selectively
determining the amount of storage of said removable
40 memory means to be associated with storage of each
picture image.

Claim 3. The improved electronic still
camera of Claim 1 further comprising picture image
resolution determining means for selectively
determining which of a predetermined set of
compression algorithm parameters are to be applied
to said digital data information signals in
response to an operator activated switch means.

Claim 4. The improved electronic still
camera of Claim 3 further comprising record marking
means for generating and recording with each said
image digital data information signals a coded mark
indicating the compression algorithm parameters
utilized in compressing said image digital data
information signals.

Claim 5. The improved electronic still
image camera of Claim 1 wherein said removable
memory means comprises digital data diskette means
having thereon a plurality of selectively
addressable magnetic sector and track sections for
recording said compressed digital data information
signals.

Claim 6. The improved electronic still
image camera of Claim 1 further comprising memory
65 formatting means operable during the camera
power-up routine to automatically format said
memory means in accordance with one of a plurality
of operator selectable type of computer apparatus.

Claim 7. The improved electronic still
image camera of Claim 5 wherein said digital data
compression algorithm of said digital data
compression means is also recorded in its entirety
on said diskette means and further comprising
record marking means for recording a digital coded
75 mark for indicating the compression algorithm
parameters utilized in compressing each said image
digital data information signal.

Claim 8. The improved electronic still
image camera of Claim 1 further comprising audio
recording means for simultaneously recording audio
80 signals associated with each subject image and
memory file correlation means for associating in

85 said memory means the respective storage locations of said audio signals with its associated image signals.

90 Claim 9. The improved electronic still image camera of Claim 3 further comprising record marking means for recording a unique mark indicating the compression algorithm parameters utilized in compressing each said image digital data information signal.

95 Claim 10. An electronic still image camera comprising:

 an optical lens,
 a shutter mechanism operably associated with said lens,
 an array of discrete light sensing pixel elements, each pixel element being responsive when said shutter mechanism is operated to incident 100 illumination from a subject image radiating through said lens to generate an analog picture information signal corresponding to said subject image,

105 pixel multiplexing means responsive to said array of pixel elements for separating an output from each pixel element into its primary color components,

110 analog to digital converter means responsive to the outputs of said pixel multiplexing means for converting said analog signals into corresponding digital data information signals,

115 digital data compression means for applying a digital data compression algorithm to said digital data information signals to generate selectively compressed digital data information signals,

120 and selectable control means for controlling digital data format compatibility between said compressed digital data information signals and one of a plurality of predetermined selectable types of computer apparatus.

125 Claim 11. The electronic still image
camera of Claim 10 further comprising memory
formatting means operable to automatically format
said data stored in memory means in accordance with
one of a plurality of operator selectable data
130 storage formats.

135 Claim 12. The electronic still image
camera of Claim 10 further comprising image
resolution determining means for selectively
determining which of a predetermined set of
compression algorithm parameters of said digital
data compression means are to be applied to said
digital data information signals.

140 Claim 13. The electronic still image
camera of Claim 12 further comprising record
marking means for marking each said image digital
data information signal to indicate which one of
said predetermined set of compression algorithm
parameters were utilized to compress said image
digital data information signals.

145 Claim 14. The electronic still image camera of Claim 10 wherein said removably mounted memory means comprises digital data diskette means and further comprising selectable diskette formatting for automatically formatting said 150 diskette means in accordance with one of a plurality of operator selectable data format types.

Claim 15. A process for storing an electronically sensed video image of an electronic still image camera comprising the steps of:

155 Generating an analog signal corresponding to the radiant light incident on a predetermined number of light sensing pixel elements to generate analog image signals,

160 Converting the analog image signals into digital electronic information signals wherein a distinct digital electronic signal corresponds to the analog image signals corresponding to the intensity of radiant light falling on the light sensing pixel elements,

165 Temporarily storing the digital electronic information signals,

170 Compressing the digital electronic information signals by applying a data compression algorithm to sort digital electronic information signals,

175 Selecting one of a plurality of predetermined data formats corresponding to a like plurality of data formats of a like number of types of computer apparatus, and

180 Storing said compressed digital electronic information signals in said predetermined data format in a digital memory.

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Claim 16. The process of Claim 15 further including the steps of:

190 Detecting the presence or occurrence of one or more of a predetermined number of conditions, and

195 Selectively activating said generating of the analog signal in response to the detection of said condition.

Claim 17. The process of Claim 15 further including the steps of:

Recording audio signals which relate to said analog image signals, and

190 Storing said audio signals in operable conjunction with said digital information signals such that both the audio and image signals can be retrieved.

Claim 18. An electronic video still image camera data format translator comprising:

195 Input means for producing electronic analog image signals corresponding to the outputs of a plurality of light sensing pixel elements corresponding to a predetermined number of discrete image sensing elements.

200 Analog to digital converter means for converting said analog image signals into corresponding digital image signals corresponding to said array of such predetermined number of discrete image sensing elements.

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Buffer means for storing image forms.

Compression selection means for applying a predetermined compression algorithm to said digital image signals.

210 Format selection means for determining one of a number of predetermined data formats in which said compressed digital image is to be stored and

Removable memory means for storing said digital images in said predetermined data format.

215 Claim 19. The electronic still image camera of Claim 10 wherein said pixel multiplexing means further comprises parallel processing switching means for simultaneously parallel processing the output of each such pixel element.

220 Claim 20. The electronic still image camera of Claim 10 further comprising remote activation means for selectively activating said camera.

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